

Management Information System for MFIs

1.0 Background

A good Management Information System (MIS) is the heart of any organization and this is true for MFIs as well. For e.g. MFIs may have capable and motivated staff, but if they lack systematized information, they will be unable to perform up to their potential.

A sound MIS is the key to achieve sustainability as it helps in providing the right type of information in achieving sustainability. It helps in reducing default, optimal rotation of portfolio, establishing sustainable interest rates, improving operational efficiency, generating reports at various levels for various stakeholders and review the progress.

(Box 1).

Common Shortcomings observed in the Information Management Practices:

- 1.) The basis formats are not comprehensive of them could be combined.
- 2) The flow and logistic aspects of transfer of information from Society to Federation to HQs and vice versa is not very efficient.
- 3) The reports produced by the MIS are not in line with the best practices information required.
- 4) There is no accurate aging analysis of all loans including the past due loans. At best, the aging analysis is approximate and there is no proper asset classification backed up by provisioning.
- 5) Clients are not classified as good, delinquent and defaulting borrowers based on (international best practices) criteria.
- 6) Credit history of the borrowers is not available.
- 7) Clear repayment schedules for borrowers at various levels do not exist.
- 8) Concise monitoring reports, tailored to the monitoring needs at various levels are not available.
- 9) There is no incorporation of the accrual system of accounting.
- 10) Status reports on repayments made by the intermediaries and HQs to semi -wholesalers and wholesalers is not tracked.
- 11) There is no integration of the network of federation and headquarters through a good and stable client- thin client- server mode.

A good information to better monitor their portfolio and serve their clients, all while working with a growing number of clients. It can enable supervisors to better monitor the work under their responsibility, provide better guidance to their staff, and pinpoint the areas that most require their attention. And it can help executive managers to orchestrate the work of the entire organisation by allowing them to monitor the institution's health through a set of well –chosen indicators and by informing critical operational and strategic decisions.

As more and more microfinance institutions scale up their activities managers are becoming increasingly aware of the need to improve their information systems. For many institutions, methodological issues, staff development, and even financing are no longer the critical constraints to growth. Instead, the most pressing need is often a system to track the status of their portfolios in a timely and accurate manner. The reliability of such systems can make the difference between the success and failure of lending operations and therefore, of an institution.

An information system that performs tolerably at a moderate volume of activity can collapse as it is fed more and more information. Manual systems may end up with huge backlogs of unprocessed data. Spreadsheet – based portfolio systems can become unwieldy as the Spreadsheet grows. An institution unprepared for rapid growth will eventually undermine the quality of its services and its financial health. But an institution that develops a system capable of producing accurate, timely, and comprehensive information on operations, especially on the loan portfolio, will strengthen its financial performance and expand its clients reach (Box 2)

Usefulness of MIS

An effective MIS would enable a MFI to achieve the twin goals of sustainability and outreach. This includes, among other things, the following:

- * Help reduce default and prevent delinquency
- * Optimize rotation of portfolio
- * Help establish sustainable interest rates
- * Leverage greater – on lending capital
- * Improve operational efficiency

A microfinance Institution generally has two main Systems:

- (a) The Accounting System.
- (b) The Portfolio Tracking System.

The fig 1.1 shows the relationship between the accounting system and the portfolio system, together with the other elements that affect the MIS. The accounting System is influenced by policies and procedures and by the methodology.

Data are processed into information, which is then presented in financial statements and management Reports. Influencing the form and content of these reports are generated by combining information from the accounting system (such as income and expenses) with information from the portfolio system (such as number, amount and size of loans or number of staff.).

MIS Defined

Management Information system (MIS) is the series of processes and action involved in capturing raw data, processing the data into usable information, and disseminating the information to users in the form needed (figure 1.)

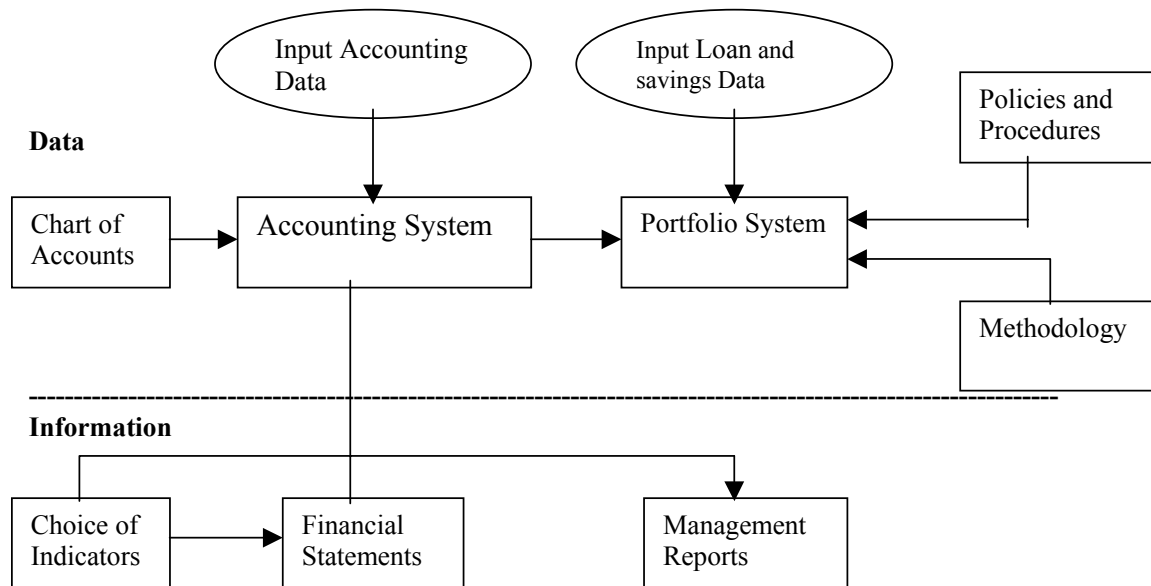
An MIS is not simply a computer program, and it involves more than just calculating numbers. Information management is first and foremost for people communicating with one another about activities that affect the functioning of their organization. The chart of accounts, all the forms used by an institution from receipts to loan Applications to staff vacation requests, meeting reports, policies and procedures, The staffing structure, job descriptions, the planning process, and yes, the computer Software – all these and more influences the flow of information in an institution

And so, together, make up the management information system.

Note the distinction between data information in the definition an MIS.

Data are unprocessed facts tat give up no insight by themselves. A single payment transaction, for example, does not show whether the payment was on time or shed Light on the loan's status. And when data are processed or transformed, it become information that can help someone make a decision or gain insight. For example, comparing actual payments with scheduled installment reveals the status of the Loan and its overdue.

Fig:1.1
The parts of the Management Information System:



2.0 Components of MIS

A full management information system includes all the systems an institution uses to generate the information that guides management's decisions and actions. A microfinance institution generally has two main systems: the accounting system, centered on the chart of accounts and General ledger and the portfolio tracking system, covering the performance of accounts for each financial product offered by the institution.

Some institutions also maintain systems for gathering data on client impact often at the behest of donors. Microfinance Institutions have other information management needs, such as for human resource management that they may want to integrate into the MIS. But financial and client activities generate by far the heaviest volume of data for processing. In large institutions, the MIS tends to be mostly or entirely Computer based, requiring software programs to capture and report on the necessary information.

The portfolio system is influenced by policies and procedures and by methodology. Data are processed into information, which is then presented in financial statements and management reports. Influencing the form and content of these reports are the indicators chosen by the institution to monitor performance. Many indicators and reports are generated by combining information from the accounting system (such as income and expenses) with information from the portfolio system (such as number, amount, and size of loans or number of staff). Although independent, the two systems share data and must be compatible.

2.1 Accounting Systems

Accounting systems should conform to the basic international accounting standards developed by such central authorities as the International Accounting Standards Committee (IASC). General ledger software programs incorporate these accounting standards and convention, so it is fairly easy to find an accounting program that performs at least the basic functions required of a microfinance institution and provide the essential accounting reports (Box 3)

Cash versus accrual accounting

- * Revolving Loan Fund accounting
- * The chart of accounts and its structure
- * General Ledger and Journal and Subsidiary Ledgers
- * Transaction Reports
- * Financial statements and Analytical reports

**Box 1.2 Managing performance through reporting and information systems:
How SHARE did it?**

SHARE is a microfinance institution operating in the southern Indian state of Andhra Pradesh. Since its establishment in 1993, SHARE has seen its clientele grow to roughly 3,500. It plans to reach an active client base of 11,000 over the next few years by doubling its staff and expanding from four branches to eight.

A critical part of SHARE's expanding strategy is to place manual information system with a computerized one that enables management to keep a finger on the pulse of operations. SHARE decided to build a home-grown, cost effective system from the ground up. At the end of last year it hired a local MIS specialist to design and develop the MIS, install computers in branch offices, and train staff in the use of the new system. To gain a good understanding of SHARE's operations the specialist worked in one of its branch offices for a few months, and he sought continuous feedback from management and staff about their information reporting needs.

To decentralize the system, SHARE plans to equip of its branch offices with a Pentium computer. The staff members being trained in the use of the new system are working closely with the MIS specialist to iron out any kinks before the system is installed in all the branches. These staff members will then help train others. The old and new systems are expected to coexist for as long as six months while staff adjust to the new one.

SHARE's MIS builds on a weekly report generated by branch offices. This report contains a brief narrative from the branch manager on key statistics for the week the number of groups forming, number and amount of loans disbursed, repayment rate, cash position, projections for the following week, and any new issues. Branch offices also prepare concise reports highlighting ongoing activities, documenting staff attendance and performance, and listing new members and groups. Branch office reports arrive every Monday morning at the head office, where the planning and monitoring department computerizes them to generate consolidated statements by Wednesday. These reports are used mainly by the planning department and the executive director.

Branch managers and branch office accountants also prepare monthly balance sheets as well as reports of receipts and payments, group fund (member saving) positions, monthly progress towards targets, cash flow projections for the following month (by week), approved loan applications, and staff evaluations. An analysis of financial ratios for individual branches all treated as profit centers and for the institution is prepared and reviewed monthly. Quarterly and annual reports are generated by aggregating the data from the weekly and monthly reports.

The internal control system is set up so that two or three people, including the branch manager, cross check the documentation and reporting for each group and group member. In the head office the monitoring and internal audit department periodically supervise the flow of funds and verify the accuracy of financial records.

Ultimately, the effectiveness of an MIS depends on how well it is used. SHARE uses the information its system generates to guide the actions of its management and staff in fulfilling its mission of extending

A computerized accounting system posts transaction entries directly to the general ledger. It replaces the various manual journals with a query function, producing reports as needed. Accounting systems can be cash-based (accounting for income and expenses when cash changes hands), accrual based, but selected accounts are accrual based).

All microfinance institutions should accrue important expenses, such as personnel benefits and interest payable on loans that may require only annual interest payments. Otherwise the Financial statements will not accurately reflect the real flow of expenses. According interest receivable on loans to clients is more complex. Accruing interest means calculating at month – end or year – end the interest owed but as yet unpaid. This unpaid interest is considered income for the period considered. Box 4 presents a section of Charts of Accounts.

A section from an MFI's Chart of Accounts		
<u>Accounts</u>	<u>Description</u>	<u>Type of Account</u>
1010	Bank accounts	Current asset
1010A	Bank account, funded by donor A	Current asset
1010B	Bank account, funded by new systems	Current asset
1010Z	Bank accounts, general fund	Current asset
1910	Equipment account	fixed asset

2.2 Portfolio Systems

Portfolio systems, by contrast, have no standards or widely accepted guidelines for loan tracking on which to draw. And they must reflect operating procedures workflow, which vary widely from institution to institution. As a result, each software program for loan tracking differs in the information tracked, the kinds of reports generated, and, most important, the features included. Key features vary widely among loan tracking software programs, such as the type of lending methodology supported, the method for calculating interest and fees, the frequency and composition of loan payments etc. Nonetheless, it must be emphasized that the report formats (including financial statements) are getting to be standardized.

2.3 Client Impact Modules

Client impact tracking, because it is often driven by donor interest rather than management needs is even less standard in approach and thus less amenable to standardized software.

Designing and Implementing a Computerized MIS

Designing and implementing a computerized management information system involves the following:

1. Discuss with the chief functionaries, advising them about the usefulness of the information system to be provided and get official permission (contract) to design and implement MIS
2. Conduct needs assessment and requirement specifications including Levels of analysis mapping (Box 5)
3. Identify input variables, records and information flows while modeling and diagramming microfinance processes for all levels. Finalize the necessary input documents and the periodically thereof for use in the software. Finalize and document the logistic aspects for input to reach processing center.
4. Discuss and finalize the information require at different levels e.g. clients field workers, supervisors, project managers, board members, wholesalers etc. Document the above as well as necessary system analysis with necessary flow charts.
5. Define calculated variables, ratios and indicators for tracking and monitoring performance and activities at all levels'.
6. Design effective reports and outputs at all levels.
7. Document all output reports, their periodicity and number of copies for use.
8. Prepare a user needs assessment and requirements specifications document to facilitate preparation of detailed requirement specifications that would form the basis for development and customization of the accounting and management information system.

9. Translate the above into program codes using appropriate front end- and back – end design languages
10. Debug the software codes before installation.
11. Prepare technical and other manuals.
12. Install software at the site of client.
13. Conduct trial run and testing of the software.
14. Finalize installation of software.
15. Maintain the software for free (1 year) and with maintenance contract (later year)

Other Key Issues to remember while designing an MIS are:

- Microfinance institutions tend to focus on credit products, but there Are many others, including savings, time deposits, checking accounts, transfer, credit cards, and insurance policies. Each of these broad categories can be further broken and all of these have Implications for information management.

Needs Assessment Procedures

A crucial aspect in designing an effective MIS what should be done as part of the needs assessment A thorough study of the accounting, loan and other management system, procedures and practices for the accumulation and reporting of (financial and other) data at the following critical levels:

- Individual
- Group level
- MFI level
- MFI to Wholesaler Level

How should it be done?

1. Study existing systems, procedures books, forms statement at the client, group and other organisational levels along with officials, staff members of MFI.
2. Rationalize their use contents and magnitude with the objective of making accounting records minimum and simplest, consistent with the requirement of information for effective decision making and control at various levels including women clients.
3. Visit groups branches, cluster, federations and other levels of organisation and hold in – depth focus group discussions with the members and organisational staff.
4. Participate in the meeting of the MFIs at all levels.
5. Have in – depth interviews and discussions with the MFI staff including loan officers field supervisors and other.
6. Get their feedback on various aspects for designing the MIS.
7. Incorporate feedback into the requirement specifications document.

- Institutions use varied lending methodologies, such as solidarity groups, individual lending, and village banking and each presents different issues for information management.

Additionally there should be:

An examination of various book keeping standards checks and balances and reporting procedures presently followed to safeguard the MFIs assets and provide relevant information. Particular emphasis should be given to the records presently being maintained at the group and client levels.

Carting and modeling of information flow within the organisation across all levels – clients to groups to field workers to loan officers to project coordinators at the central office, etc.

An analysis of existing information system and the ways in which these were incorporated into the organization's present decision making framework.

- Identification of the means of collecting collating and organizing field level data across the board.

3.0 Report Generation

Reports are essential for distributing information and thus enabling users of that information to perform their jobs well and make appropriate decisions. A good MIS will therefore produce reports in a hierarchical structure, starting with detailed transaction reports useful at the lowest level and then moving up to summarized financial statements and operational information needed by senior management and the board of directors. The reports should be designed so that the detail at one level supports the summarized information at the next level.

Process of Creating Reports

1. Define information needs by type of reports and stakeholders categories.
2. Identify report categories and level of detail for each (across stakeholders).
3. Decide on frequency and timeliness.
4. Specify information to be included in various reports/
5. Incorporate trend analysis.
6. Specify period covered.
7. Ensure usability with good design (readability and parsimony).
8. Incorporate graphic (visual) analysis.
9. Provide report templates (if possible using above).
10. Suggest reporting framework

Basically, the reports can be grouped in seven categories and eight types.

3.1 Categories of Reports

1. Reports for clients
2. Reports for field staff
3. Reports for branch and regional managers
4. Reports for senior managers in the head office
5. Reports for the board
6. Reports for donors and shareholders
7. Reports for regulators

3.1 Types of Reports in an MIS

1. Savings Reports
2. Savings account activity
3. Teller savings report
4. Active savings accounts by branch and product
5. Dormant savings account by branch and product
6. Upcoming maturing time deposits
7. Savings concentration report.
8. General Reports

2. Loan Activity Reports

1. Loan repayment schedule
2. Loan account activity
3. Comprehensive client status report
4. Group membership report
5. Teller loan report
6. Active loans by loan officer
7. Pending clients by loans officer

8. Daily payments reports by loan officer (DCBs)
9. Portfolio concentration report

3. Insurance Reports

1. Insurance account activity
2. Comprehensive Client
3. Premiums paid report
4. Claims reports – processed and pending, etc.

4. Portfolio Quality Reports

1. Detailed aging of portfolio at risk by branch
2. Delinquent loan by loan officer
3. Delinquent loans by branch and product
4. Summary of portfolio at risk by loan officer
5. Summary of portfolio at risk by branch and product
6. Detailed delinquent loan history by branch
7. Loan write – off recuperation report
8. Aging of loans and calculation of reserve
9. Staff incentive report

5. Income Statement Reports

1. Summary income statement
2. Detailed income statement
3. Income statement by branch an region
4. Income statement by program
5. Summary actual – to – budget income statement
6. Detailed actual – to - budget income statement
7. Adjusted income statement

6. Balance Sheet Reports

1. Summary balance sheet
2. Detailed balance sheet
3. Programme format balance sheet
4. Capital adequacy report

7. Cash Flow Reports

1. Cash flow review
2. Projected cash flow
3. Gap reported

8. Other Reports.

1. General summary reports
2. Statutory reports
3. Credit rating reports
4. Specialized comparative reports
5. Credit health reports

References:

- * Microfinance Institutions - Issues in Sustainability- Chapter 11, Design and Implementation Of MIS for MFIs: Ramesh Arunachalam.
- * Management Information Systems for Microfinance Institutions: A Handbook, Charles Waterfield & Nick Ramsing. Copy right CGAP/World Bank.